PATENT COOPERATION TREATY

2-12-03





INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER see Notification of	of Transmittal of International Search Report
15280-3421PC	ACTION (Form PCT/ISA/2	(20) as well as, where applicable, item 5 below.
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
PCT/US 98/25742	04/12/1998	05/12/1997
Applicant		
THE GOVERNMENT OF THE UNI	TED STATES OFet al.	
according to Article 18. A copy is being tra		nority and is transmitted to the applicant
This International Search Report consists X It is also accompanied by	of a total of4 sheets. a copy of each prior art document cited in this	report.
Basis of the report		
 With regard to the language, the i language in which it was filed, unle 	nternational search was carried out on the basess otherwise indicated under this item.	sis of the international application in the
the international search was Authority (Rule 23.1(b)).	as carried out on the basis of a translation of t	he international application furnished to this
was carried out on the basis of the	d/or amino acid sequence disclosed in the inesequence listing: nal application in written form.	nternational application, the international search
	mational application in computer readable form	n.
▽	this Authority in written form.	
The statement that the sub	this Authority in computer readble form. sequently furnished written sequence listing d	oes not go beyond the disclosure in the
international application as X the statement that the info furnished		s identical to the written sequence listing has been
2. X Certain claims were four	nd unsearchable (See Box i).	
3. Unity of Invention is lack	king (see Box II).	
4. With regard to the title,		
X the text is approved as sul	omitted by the applicant.	
the text has been establish	ned by this Authority to read as follows:	
5. With regard to the abstract,		
the text is approved as suithe text has been establish within one month from the	omitted by the applicant. ned, according to Rule 38.2(b), by this Authori date of mailing of this international search rep	ty as it appears in Box III. The applicant may, ort, submit comments to this Authority.
6. The figure of the drawings to be publi		-
as suggested by the applic		None of the figures.
because the applicant faile	ed to suggest a figure.	
because this figure better	characterizes the invention.	

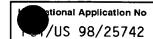




Box I	Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)
This Inte	rnational Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. X	Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely: Remark: Although claims 9-14,40-43,50 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2.	Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3.	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II	Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This Inte	rnational Searching Authority found multiple inventions in this international application, as follows:
1.	As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.	As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.	As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4.	No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark	on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.

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A. CLASSIFICATION OF SUBJECT MATTER IPC 6 C12N15/30 C07K14/445 A61K39/015 C07K16/20 C12N15/62 C12N1/19

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

 $\begin{array}{ccc} \text{Minimum documentation searched (classification system followed by classification symbols)} \\ IPC~6~&C12N~&C07K~&A61K \end{array}$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

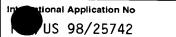
C. DOCUM	ENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 89 10936 A (US) 16 November 1989 see figure 1	1,4
X	WO 95 08631 A (US HEALTH) 30 March 1995 see page 33 - page 34; claim 15	15
P,X	WO 98 14472 A (GOZAR MARY MARGARET ;US HEALTH (US); KASLOW DAVID C (US)) 9 April 1998 see page 52; claim 1	15
Α	WO 94 01552 A (US ARMY) 20 January 1994	
Α	WO 94 28930 A (VIROGENETICS CORP) 22 December 1994 see claim 3; figure 9	1,4
	-/ 	

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
 Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed 	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family
Date of the actual completion of the international search	Date of mailing of the international search report
13 April 1999	23/04/1999
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Espen, J

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INTERNATIONAL SEARCH REPORT





C (Continu	C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT			
Category °	Citation of document, with indication,where appropriate, of the relevant passages	I Dolonovia de la se		
Calegory	Citation of document, with indication,where appropriate, of the relevant passages	Relevant to claim No.		
A	PREMAWANSA S ET AL: "Target antigens of transmission blocking immunity of Plasmodium vivax malaria. Characterization and polymorphism in natural parasite isolates." JOURNAL OF IMMUNOLOGY, (1990 JUN 1) 144 (11) 4376-83. JOURNAL CODE: IFB. ISSN: 0022-1767., XP002099364 United States			
Α	SNEWIN VA ET AL: "Transmission blocking immunity in Plasmodium vivax malaria: antibodies raised against a peptide block parasite development in the mosquito vector" THE JOURNAL OF EXPERIMENTAL MEDICINE, vol. 181, 1995, pages 357-362, XP002099365			
A	AGABIAN N ET AL: "Molecular strategies of parasitic invasion" 1987, ALAN R. LISS, INC., NEW YORK XP002099366 see MENDIS ET AL: 'Immune modulation of parasite transmission in Plasmodium vivax malaria. Anti-gamete antibodies can both block and enhance transmission see page 417 - page 426			

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n on patent family members

US 98/25742

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Patent document cited in search report	t	Publication date	Patent family member(s)	Publication date
WO 8910936	А	16-11-1989	AT 139537 T AU 619312 B AU 3763789 A DE 68926712 D DE 68926712 T EP 0418310 A IL 90134 A JP 2812759 B JP 3503122 T US 5853739 A US 5217898 A	15-07-1996 23-01-1992 29-11-1989 25-07-1996 17-04-1997 27-03-1991 10-06-1997 22-10-1998 18-07-1991 29-12-1998 08-06-1993
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